first electrode, and forming at least one layer of organic light emissive material over the at least one polymer layer;

or forming at least one layer of organic light emissive material over the first electrode, removing physisorbed water from the surface of the at least one organic light-emissive material, forming a coupling layer, and forming, by self-assembly, at least one polymer layer over the at least one layer of light emissive material; and

forming a second electrode for the device over the at least one layer of light emissive material.

B3 cont

26. (Amended) A method according to claim 24, wherein the step of processing the at least one polymer layer comprises exposing the polymer layer to a reactive agent to promote a chemical reaction in the at least one polymer layer.

B4

REMARKS

Following this amendment, the remaining claims are 1-8, 10-43, and 47-49.

Applicant notes with appreciation the finding that claims 3, 9, 10, 14, 15, 23-43 and 49 contain allowable subject matter and would be allowed if rewritten in independent form.

Applicant has now amended independent claims 1 and 22 to incorporate the subject matter of allowable claim 9.

Applicant has amended the specification to include section headings as requested by the Examiner.

Applicant has amended claim 26 to recite "the at least one polymer layer" to overcome the Examiner's objection for lack of proper antecedent basis.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

Claims 44-46 have been cancelled, which renders moot the Examiner's objection under Section 112.

With regard to the Examiner's objection to claim 2 under Section 112, applicant's amendment of claim 1, from which claim 2 depends, overcomes the objection consistent with the understanding of the Examiner.

Response to Patentability Rejections

The rejection of claims 44-46 has been rendered moot by applicant's cancellation of these claims.

The Examiner rejected claims 1, 2, 4, 5, 8, 11-13, 16-22 and 47-48 as being obvious over U.S. Patent No. 5,798,170 to Zhang in view of U.S. Patent No. 5,208,111 to Decher.

However, on page 4 of the office action the Examiner states that the subject matter of these claims would be allowable if they were to include the limitation of claim 9. Accordingly, since the subject matter of independent claims 1 and 22 now incorporate the subject matter of claim 9, claims 1 and 22 (and all claims dependent thereon) should be allowable.

The subject matter of independent claim 48, which does not have this limitation, is also not obvious over the cited references for the following reasons.

The skilled person, when presented with the problem solved by the present invention, would not have consulted Decher. In this regard, the present application seeks to provide an improved fabrication process for organic light emitting devices

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

which enables a reduction in processing time and cost, and results in a more efficient device. Decher makes no reference to light emitting devices. In this connection, the Examiner's assertion that the homogenous layer thickness provided by Decher "enhances the control of the organic light emitting device and allows for less undesirable fluctuations in performance" is unfounded and could only have been made using the benefit of hindsight, i.e., with the knowledge of the present invention. Accordingly, the skilled person would not have consulted Decher and so it would not have been obvious to combine its teaching with that of Zhang.

Furthermore, even if the skilled person were to combine the teaching of Zhang and Decher, he/she would not have arrived at the invention described in present claim 48. In particular, the combination of prior art documents would not teach the skilled person to form the at least one polymer layer by self-assembly while ensuring that the at least one layer of organic light emissive material is formed by a method other than by self assembly.

As stated on page 3 of the present application, the process of producing by self assembly a film of sufficient thickness to give a working LED is extremely time consuming, due to the number of dipping and rinsing steps involved. Accordingly, to produce an organic light emitting device by self assembly would have been both costly and time consuming. Thus, providing a method in which the at least one polymer layer is formed by self assembly but in which the organic light emissive layer is not, enables the significant advantages of providing an improved light emitting device while ensuring substantial savings in both cost and time. In this regard, the significant advantages in

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

the light emitting devices that result from the method of the present invention when compared to conventional methods which do not employ the method of self assembly are shown, for example in the comparison of device I and device II in the Table on page 30.

Thus, in view of the fact that Zhang does not refer to self assembly, and since Decher does not refer to the potential problems of self assembly or to light emitting devices *per se*, the subject matter of independent claim 48 would not have been obvious from the combination of these documents.

In view of the foregoing amendments and remarks, Applicant respectfully requests the reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: March 3, 2003

By: _____
Therese A. Hendricks
Reg. No. 30,389

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

APPENDIX

IN THE SPECIFICATION:

See attached sheets with edits (pages 1, 3, 12, 13).

Abstract

Provided is a method of fabricating an organic light-emitting device, which method comprises the steps of: forming a first electrode (4) for the device over a substrate (2); either forming by self-assembly at least one polymer layer (6,8) over the first electrode (4) and forming other than by self-assembly at least one layer of organic light emissive material (10) over the at least one polymer layer (6, 8); and forming a second electrode (12) for the device over the at least one layer of organic light emissive material (10); or forming other than by self-assembly at least one layer of organic light emissive material over the first electrode and forming by self-assembly at least one polymer layer over the at least one layer of organic light emissive material; and forming a second electrode for the device over the at least one polymer layer. Also provided is an organic light emitting device, obtainable according to the method of the present invention.

IN THE CLAIMS:

Please cancel claims 9 and 44-46.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

Please amend claims 1, 22 and 26 as follows:

1. (Amended) A method of fabricating an organic light-emitting device, which method comprises the steps of:

[forming a first electrode for the device over a substrate;]

providing a substrate comprising a first electrode and a glass or a plastics material;

either forming by self-assembly at least one polymer layer over the first electrode and forming other than by self-assembly at least one layer of organic light emissive material over the at least one polymer layer; and forming a second electrode for the device over the at least one layer of organic light emissive material;

or forming other than by self-assembly at least one layer of organic light emissive material over the first electrode and forming by self-assembly at least one polymer layer over the at least one layer of organic light emissive material; and forming a second electrode for the device over the at least one polymer layer.

22. (Amended) A method of fabricating an organic light-emitting device which method comprises the steps of:

forming a first electrode for the device over a substrate, wherein said substrate comprises a glass or a plastics material;

either removing physisorbed water from the surface of the first electrode, forming a coupling layer, forming, by self-assembly, at least one polymer layer over the first electrode, and forming at least one layer of organic light emissive material over the at least one polymer layer;

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

or forming at least one layer of organic light emissive material over the first electrode, removing physisorbed water from the surface of the at least one organic light-emissive material, forming a coupling layer, and forming, by self-assembly, at least one polymer layer over the at least one layer of light emissive material; and

forming a second electrode for the device over the at least one layer of light emissive material.

26. (Amended) A method according to claim 24, wherein the step of processing the at least one polymer layer comprises exposing the polymer layer to a reactive agent to promote a chemical reaction in the [transport] at least one polymer layer.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
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